

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A separator especially for lithium high energy batteries, comprising a sheetlike flexible substrate having a multiplicity of openings and having a porous inorganic coating on and in said substrate, the material of said substrate being selected from a nonwoven of electrically nonconductive polymeric fibers, wherein the separator has a weight of less than  $50 \text{ g/m}^2$  and a thickness of less than  $35 \text{ }\mu\text{m}$  and in that the porous inorganic coating is constructed from oxide particles having a primary particle size of from 5 to 100 nm and adhered via  $\text{SiO}_2$  or  $\text{ZrO}_2$ , wherein the coating is prepared from a sol or suspension comprising a solvent which comprises a mixture of at least one alcohol [[or]] and at least one hydrocarbon, ~~or mixtures thereof.~~

Claim 2 (Previously Presented): The separator of claim 1, wherein said separator has a weight of less than  $20 \text{ g/m}^2$ .

Claim 3 (Previously Presented): The separator of claim 1 wherein said polymeric fibers are selected from fibers of polyacrylonitrile, polyester and/or polyolefin.

Claim 4 (Previously Presented): The separator of claim 1 wherein said polymeric fibers are from 0.1 to  $10 \text{ }\mu\text{m}$  in diameter.

Claim 5 (Previously Presented): The separator of claim 1 wherein said flexible substrate has a porosity of from 50% to 97%.

Claim 6 (Previously Presented): The separator of claim 1 wherein said flexible substrate is less than 30  $\mu\text{m}$  in thickness.

Claim 7 (Previously Presented): The separator of claim 6, wherein said nonwoven is less than 20  $\text{g/m}^2$  in weight.

Claim 8 (Previously Presented): The separator of claim 1 wherein said coating on and in said substrate comprises an oxide of the metals Al, Zr and/or Si.

Claim 9 (Previously Presented): The separator of claim 1 wherein said separator has a porosity of from 30% to 80%.

Claim 10 (Previously Presented): The separator of claim 1 wherein said separator has a breaking strength of more than 1 N/cm.

Claim 11 (Previously Presented): The separator of claim 1 wherein said separator is bendable around a radius down to 50 mm without damage.

Claim 12 (Previously Presented): The separator of claim 1 wherein said separator is bendable around a radius down to 0.5 mm without damage.

Claim 13 (Withdrawn): A process for producing a separator as claimed in claim 1 wherein said process comprises providing a sheetlike flexible substrate having a multiplicity of openings with a coating on and in said substrate, the material of said substrate being selected from nonwovens less than 30  $\mu\text{m}$  in thickness of electrically nonconductive fibers of

polymers and said coating being a porous electrically insulating ceramic coating which is prepared by applying a suspension to said substrate and heating one or more times to solidify said suspension on and in said substrate, the suspension being obtained by suspending metal oxide particles of at least one oxide of the elements Al, Zr and/or Si, which have a primary particle size of from 5 to 100 nm, in a sol of at least one of the elements Si and/or Zr.

Claim 14 (Withdrawn): The process of claim 13, wherein said fibers are selected from the group consisting of polyacrylonitrile, polyester, polyolefin and mixtures thereof.

Claim 15 (Withdrawn): The process of claim 13 wherein said suspension is brought onto and into said substrate by printing, pressing, rolling, knife coating, spread coating, dipping, spraying or pouring.

Claim 16 (Withdrawn): The process of claim 13 wherein said sol is prepared by hydrolyzing at least one alkoxide compound of the elements Zr, Al and/or Si or at least one nitrate, carbonate or halide of the elements Zr, Al and/or Si.

Claim 17 (Withdrawn): The process of claim 13 wherein metal oxide particles having an average primary particle size of from 7 to 50 nm are suspended.

Claim 18 (Withdrawn): The process of claim 13 wherein the mass fraction of said suspended component is from 1 to 100 times that of the sol used.

Claim 19 (Withdrawn): The process of claim 13 wherein said suspension present on and in said support is solidified by heating at from 150 to 500 °C.

Claim 20 (Withdrawn): The process of claim 19, wherein said heating is effected at from 200 to 280 °C for from 0.5 to 10 minutes.

Claim 21 (Canceled).

Claim 22 (Withdrawn): A battery comprising a separator as claimed in claim 1.

Claim 23 (Withdrawn): The battery as claimed in claim 22 wherein said battery is a lithium high energy battery.

Claim 24 (Withdrawn): A method of separating components in a battery comprising utilizing the separator as claimed in claim 1.

Claim 25 (Withdrawn): The method as claimed in claim 24 wherein said battery is a lithium battery.

Claim 26 (Currently Amended): The separator of claim 1 wherein the solvent comprises (1) at least one of methanol, ethanol and propanol, and (2) cyclohexane.

Claim 27 (Canceled).